

Simulation via Instant Messaging-Birmingham Advance

Please assess the patient as you would interact in a real-life clinic. Please request as much information about the patient as you like. However, please bear in mind you have 25 minutes to complete all of the following in each case:

- 1. History
- 2. Physical Examination
- 3. Investigations (forms will be provided)
- 4. Your diagnosis and proposed management plan to the MDT
- Post-op follow-up plan (if indicated)

You will receive instructions as you go through the cases. Please feel free to ask the moderators if any doubts at anytime throughout the case.

You have about 25 minutes to complete the simulation, please type "ready" when you are ready to start.

### **PARTICIPANT**

Thank you. I am ready.

### **MODERATOR**

30-year-old woman refferred to the endocrine clinic by her dentist who noted facial changes over the last 4 years.

Please assess this patient in your endocrine clinic and request for any information you will need in your assessment.

#### PARTICIPANT

Good morning. I am Dr. Kempegowda. One of the endocrine doctors. How can I help you today?

### **PARTICIPANT**

Is there any significant family history?



No.

### **PARTICIPANT**

What do you do for a living?

### **MODERATOR**

The information you requested is not available - either because it was normal or not relevant to the case.

# MODERATOR

You have gathered all the information that is required in the history. What examination would you like to perform for this patient?

### PARTICIPANT

Okay. Thank you. Does the patient have any visual changes? BMI? BP? I would also like to perform a systemic examination as well.

### MODERATOR

Enlargement of her jaw.

Anterior open bite.

BMI: 22.95 BP normal.

All other examinations are normal (CVD, cranial nerves - visual fields).

Investigations	Results	Reference range
Calcium	2.65 mmol/L	2.10-2.60
Albumin	54 g/L	34-51
Total protein	84 g/L	60-80
ALP	71 U/L	35-105
Cortisol	99 nmol/L	Cortisol ref range 06:00-10:00: 172-497 nmol/L
Oestradiol	163 pmol/L	Fol: 98-571
		Mid cycle: 176-1153
		Lut: 122-1094
FSH	8.2 IU/L	Fol: 3.5-12.5
		Lut: 1.7-7.7
LH	7.7 IU/L	Fol: 2.4-12.6
		Luteal: 1-11.4
Prolactin	232 mU/L	100-500
17OH P	1.1 nmol/L	
Androstenedione	3.8 nmol/L	
Testosterone	0.7 nmol/L	< 1.9
SHBG	46.3 nmol/L	26.1-110.0
GH	2.42 ug/L	
IGF-1	41.9 nmol/l	9.5-32.0
TSH	1.87 mIU/L	0.4-4.5
FT4	20.2 pmol/L	10.0-22.0

# PARTICIPANT

Thank you. There is an increase IGF-1 indicating acromegaly. I would like to confirm this by requesting a oral glucose tolerance test, please?

# MODERATOR

# OGTT results as below.

Minutes	Blood glucose (mmol/L)	Growth Hormone (nmol/L)
0	4.3	6.0
30	5.4	1.8
60	4.8	0.9
90	4.9	0.5
120	3.9	0.4

# Please summarise the MRI findings.

### **PARTICIPANT**

Large pituitary tumour on the right with pressure on chiasm.

## **PARTICIPANT**

Features suggestive of acromegaly with raised IGF-1 levels. With normal OGTT and MRI showing adenoma. Likely to suggest surgery if there are compression effects.

### **MODERATOR**

You now have all the information required to make a diagnosis for this patient.

# MODERATOR

Please write to the MDT:

- Summary of your case.
- State the diagnosis (and its rationale).
- -propose management plan

### **MDT**

Newly diagnosed acromegaly. GP/self-referral with acromegalic featrues.

Pituitary adenoma.

Size: 18mm x 15mm x 14mm Location: Predominantly right.

Consistency: Cystic

Cavernous sinus involvement: KNOSP grade 1 on the right

Optic chiasm involvement: None

Normal residual pituitary MDT outcome: Surgery

### **MODERATOR**

### **Operation note:**

This procedure (trans-sphenoidal) was completed successfully 6 weeks after her initial presentation.

# MODERATOR

Please outline your post-op management plan until discharge and long-term follow-up for this patient.

# PARTICIPANT

Okay, thank you. I would like to monitor IGF-1 and osmolalities post-operatively, and repeat MRI in 3 months to look for any residual disease.

# MODERATOR

The simuation has ended. Many thanks and the case will be discussed shortly.